

# COST and MANAGEMENT

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THE CANADIAN SOCIETY OF  
COST ACCOUNTANTS & INDUSTRIAL ENGINEERS

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# • EDITORIAL •

## Wasted Man Power

By the time this editorial appears in print, the Victory Loan will be a thing of the past, and we sincerely hope that it will be well oversubscribed. Moreover, we think that it will, but we also think that much more money could have been gathered in as a result of the loan and with far less trouble if it were not for the fact that the average man in the street is thinking that much of the money so subscribed is being poured down the well-known sewer. Now we know perfectly well that in some quarters it isn't considered good practice to raise questions as to the rights or wrongs of certain phases of our war effort but we take the chance of being misunderstood when we point out some of the things that the said man in the street is thinking, yes, and saying. For one thing take the question of man power. Recently we had the spectacle of quite a number of Mr. Cottrelle's little men driving around various towns and cities and endeavouring to persuade Service Station operators to sell gasoline and to accept loose gasoline coupons, or to sell this scarce commodity after hours, or something of the kind. At the same time various government boards officials are wailing about the lack of men for the war effort. Now the practice of "spotting" may be something necessary in the war effort but personally we can't see it. We think such a practice belongs in Germany, and moreover, who pays the salaries and the expenses of such spotters? You and I by means of taxes and by means of Victory Bonds and War Savings Certificates. Be it noted that these lines will appear after the loan has been, we hope, oversubscribed, so that they cannot accuse us of being one of Hitler's little men because of what we say in this regard. If men are so badly needed for the war effort, then why not give these spotters a job in a war production plant? Then take the methods employed in calling up trainees for the Army. We have been told on several occasions of the serious situation at the Army's new Manning Pool where it is said that scores of men are lying idle, men of extremely low category, obviously unfit for the Army but who are said to be kept lying around for days and sometimes weeks before finally being allowed to go, and in the meantime they are being paid \$1.30 per day plus, and you and I and the man in the street are paying it. Such men could be used in some phase of the war effort and so help relieve the serious situation. Now we have taken such statements with a grain of salt. We have been loath to believe that such conditions did prevail but, less than twenty-four hours prior to these lines being written we travelled over fifty miles with a single man of thirty-six who, on his first medical was placed in Category E-1, and yet he received his second call and was on his way to a Basic Training Camp. Here he will probably receive a second medical, be kept hanging around for days, perhaps weeks, drawing army pay and rations, etc., at your expense and mine and at the same time being kept out of a share in some phase of

#### ACROSS THE SECRETARY'S DESK

the civilian war effort. Now these are apparently not isolated cases, there is undoubtedly a serious waste both in manpower and in money, and it should be stopped.

The government of the day outlines the policies, not the details, and there isn't much sense in raving against the government in this connection because the government cannot be expected to have its fingers on every little detail.

One hears from time to time of serious waste both of manpower and materials in our war production plants. Maybe such waste is exaggerated but apparently also there is some basis for all the talk. Then why not let us have a Waste Controller, one who would have absolute authority to control waste of both manpower and materials, both of which mean money. We have every other type of Controller and each seems to make a pretty good fist of controlling everything except waste manpower and materials. It's worth a trial anyway.

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## Across the Secretary's Desk

Since the present season opened the writer has had the privilege of attending meetings in Ottawa, Hamilton and Toronto and has conferred with directors in two other centres. In Ottawa the first two meetings were very successful and the same goes for Toronto. In Hamilton also and in Kitchener the opening meetings were very successful and the success that has crowned the efforts in all these centres, to say nothing of Montreal, Vancouver and Fort William-Port Arthur is a most happy augury for the season as a whole. In Ontario particularly the agreement reached between the Society of Industrial and Cost Accountants of Ontario and all Ontario Universities for a Lecture and also a Correspondence Course in subjects covering the examinations of the Society will mean not only a tremendous influx of new student members but will also mean controlled student activities along the soundest of lines and we can say with every truth that a new and very important milestone in the history of the Society has been reached. All in all we have no hesitation in saying that the year of 1942-43 promises to be the most successful in our history. I say this in the full knowledge that perhaps I may be called to account for such a statement, in a jocular manner, of course, by some members, but I have no fear. At the next annual meeting of the Society I predict the increase in membership will easily top that of any previous year. Despite extra work and longer hours made necessary by increased volume of work and depleted staffs, our members are responding nobly to the suggestion that they take at least one night per month off to attend meetings and their continued support in this respect is not only requested but anticipated. And now in different vein. At the annual meeting of the Society in June it was suggested that the Society publish in "Cost and Management" a list of all members serving in the armed forces. Since that time we have repeatedly requested that we be informed of such members, and we are sorry to relate that the response has been just plain terrible. One chapter has notified us of its members serving in the armed forces, another has sent in a list almost complete, and several members have given us other

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names, but most chapters appear to have utterly ignored the request. It is absolutely impossible for your Secretary to obtain such knowledge without the assistance of chapters, and once more we ask your assistance in this matter, which is quite important. At a Joint Meeting of the Hamilton and Toronto chapters in Toronto on October 20th, one member gave me the names of six prospective members and I was introduced to two others. This is the kind of co-operation we love, and it speaks volumes for the interest some of our members display in the matter of increased membership. Let me hear from others in this respect. The sooner the better.

R.D.

## Chapter Notes

### COST AND MANAGEMENT INSTITUTE, MONTREAL

The Cost and Management Institute of Montreal (at heart still the Montreal Chapter) held its opening dinner meeting at the Windsor Hotel on Friday, October 2nd, and it was a grand affair. The speaker was K. W. Taylor, M.A., Professor Political Economy at McMaster University and now on leave of absence and acting as Secretary of The Wartime Prices and Trade Board. Mr. Taylor spoke on "Trends in Price Control". Percy W. Wright, L.C.M.I., President of the Canadian Society of Cost Accountants and Industrial Engineers, introduced Mr. Taylor and at the conclusion of a splendid address which will be published later in "Cost and Management", Dr. J. P. Day of McGill University moved a hearty vote of thanks.

Our good friend and dean of the Society, Lorenzo Belanger, spoke about both the Canadian Society and the Institute with his usual bilingual fluency. Inasmuch as the lack of foodstuffs in wartime makes the printing of a menu a most risky affair we publish instead the names of those occupying seats at the head table, a most imposing list by the way, and it can safely be said that this was one of the most successful opening dinners of the Montreal Chapter . . . pardon, The Cost and Management Institute. A feature of the dinner was the fact that our good friend Donald Peddie was responsible for and conducted the dinner music and proved himself, in addition to being a most excellent chairman of the dinner committee, a most accomplished violinist.

The afternoon of Friday, October 9th, 1942, will linger long in the memories of those members of the Institute who accepted the invitation to look over the work being accomplished at the Montreal Locomotive Works and, be it said in passing, those who could not take the in trip, missed much—much indeed.

Mr. H. Valle, Shop Accountant, after seeing that all present were armed—or tagged—with decorative "Visitors' Badges", informed those present that one of the new 6100 locomotives was waiting, under full steam, ready to pull out and, after hastily scrambling over tracks, through shops and around busy workmen, we found ourselves in the very front of the group attending the launching (if they are launched) of a brand new locomotive. From that point our members were split into three groups under the guidance of Mr.

## CHAPTER NOTES

Valle, Mr. G. E. Squires and Mr. G. Dougherty, and we started to go backwards through the Locomotive Shops.

No one will now deny the interest there is in tracing the life of a locomotive back to the point where it is merely a mass of various unformed metals. A new locomotive,—the finished product; one almost completed, several in various stages of assembly; until, finally, we arrived at the point where nothing that resembled a locomotive at all seemed to be going on. Wheels—before they were wheels; domes—before they were domes; boilers—before they were boilers; cylinders—before they were cylinders; and all the other parts that go to make up a completed locomotive—before they were what they finally became.

There is something fascinating about a drop hammer. Glowing, living, metal being formed under effective blows into something useful to mankind. Darkening surfaces, scaling, only to reveal anew the white-hot surface beneath as the foundations spring, intentionally, to avoid undue stress, under the mighty blows of the machine which has replaced the village blacksmith.

Bench work, automatic lathes, milling machines, shaping machines, gigantic overhead cranes, machine tools, chucks, taper attachments, drills, turning forms, jigs and fixtures, rules, scribers, dividers, calipers, gauges, trammels, templates, micrometers, feelers. All these, and many more, seen working and being used by skilled artisans—each in his own line a specialist. On through the Marine Engine Shop and into the Shell Shop—surprising that such beautifully symmetrical and glistening objects of the machinist's art should be destined as instruments of death. Back through shops and workrooms spotlessly clean—by welders and riveters until the three groups met again in the open outside air in ear-ringing quietness where Mr. Valle outlined the accounting system employed and the methods used in recording costs.

Members of the Costs and Management Institute owe much to Mr. Valle, to his assistants, and to the officials of the Montreal Locomotive Works, for one of the most interesting plant visits we have ever enjoyed. We left, knowing much not known before, hoping that we might again be welcome, wishing that Mr. Valle and the members of his staff accept our sincere invitation to attend our meetings.

### Toronto Chapter.

The Joint Meeting between the Toronto and Hamilton Chapters, now a most successful and looked for annual affair was held on Tuesday, October 2nd at Eaton's Round Room and was probably the most successful yet held. One hundred and twenty-five sat down to dinner and afterwards listened with rapt attention and interest to a particularly fine talk by Mr. James S. Duncan, President and General Manager of the Massey-Harris Co. Ltd., and who was formerly Deputy Minister for Air. The title of Mr. Duncan's talk was "After Victory—What?" and it is enough to state that we have never listened to a better talk. It is hoped to reproduce the talk in a future issue of "Cost and Management" and this will compensate in some measure those who were unable to hear it. The entertainment which followed was up to the usual high standard of the Toronto Chapter, and that is saying plenty.

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### Hamilton Chapter.

The opening meeting of the Hamilton Chapter was held at the Royal Connaught Hotel on October 14th, and attracted a good attendance, there being forty-five for dinner and about sixty-five for the meeting, despite other counter attractions. The speaker was an old friend in Mr. B. H. Yardley of the Stanley Works, Ltd., Hamilton, who gave a really fine talk on "Priorities". At the conclusion there was a good discussion period and a hearty vote of thanks was accorded the speaker.

### Ottawa Chapter.

The Ottawa Chapter got off to a fine start in September with a talk by Mr. G. E. Footit, C.A., of the Income Tax Department, who spoke to the members on "Income and Excess Profits Taxes in Relation to Corporations." There were thirty-five for dinner and a number came afterward. It was not only a most instructive address on a very timely subject but the discussion period was the best yet.

On October 19th, the Chapter was favored by a visit from Harold P. Wright, President of the Society who spoke on "The Re-Organization of an Industrial Accounting System" after which he outlined the Educational Program of the Society. Mr. Wright was very well received and was accorded a hearty vote of thanks at the close. For the November issue it is expected that Paul Kellogg, L.C.M.I., President of Stevenson & Kellogg Ltd., of Montreal, will be the speaker.

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### HEAD TABLE GUESTS:

at the

### OPENING DINNER MEETING OF THE COST AND MANAGEMENT INSTITUTE OF QUEBEC

C. P. Dumas, M.C.I., L.C.M.I.,

First Vice-President, The Cost and Management Institute.

Maurice Chartrand, B.Sc.,

Hotel and Restaurant Consultant

R. W. Louthood, A.C.I.S., L.C.M.I.,

Secretary, The Cost and Management Institute.

J. C. Thivierge,

Branch Manager, Banque Canadienne Nationale.

John Rae,

Chief of Routine Efficiency, Bank of Montreal.

N. P. Woods,

Assistant Secretary, Shawinigan Water and Power Company.

T. Taggart Smyth, F.C.I.S.,

General Manager, Montreal City and District Savings Bank.

St. Clair Ross,

Insurance Engineer, Morris and MacKenzie, Ltd.

Guy Tombs,

Past President, The Canadian Industrial Traffic League.

J. P. Day, B.A., B.Sc., Ph.D.,

Professor of Economics, McGill University

## NEW MEMBERS

- Kenneth W. Taylor, M.A.,  
Secretary, The Wartime Prices and Trade Board.  
A. V. Madge, L.C.M.I.,  
President, The Cost and Management Institute.  
P. W. Wright, L.C.M.I.,  
President, The Canadian Society of Cost Accountants & Industrial Engineers.  
R. R. Thompson, M.C., V.D., A.C.A., C.A., L.C.M.I.,  
Professor of Accountancy, McGill University.  
H. C. Reid, B.A., M.S. (Trans.),  
General Statistician, Canadian Pacific Railway.  
J. Aldéric Raymond,  
President, The Windsor Hotel, Montreal.  
Lorenzo Bélanger, C.G.A., C.P.A., L.C.M.I.,  
Public Accountant.  
J. Edouard Labelle, K.C.,  
President, Canadian Vickers Ltd.  
Harrison C. Hayes, B.Com., C.A.,  
Second Vice-President, Society of Chartered Accountants of the Province of  
Quebec.  
L. Favreau, C.P.A.,  
Professor of Accountancy, Les Ecoles des Hautes Etudes.  
J. W. Parkinson, C.G.A.,  
President, Montreal Branch, General Accountants Association.  
J. P. Merineau, C.P.A., L.C.M.I.,  
Treasurer, The Cost and Management Institute.  
S. Farquharson, M.E.I.C.,  
Resident Cost Accountant, Treasury Branch, Department of Finance.  
Thos. Ashworth, M.C.I., L.C.M.I.,  
Second Vice-President, The Cost and Management Institute.
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## New Members

### Montreal Chapter.—

- Paul Rochon, Stevenson & Kellogg Ltd., Montreal.  
H. F. Franklin, The National Breweries Ltd., Montreal.  
J. P. Vaillancourt, Montreal.  
J. Gordon Mock, Jenkin Bros., Ltd., Montreal.  
S. E. Diamond, Montreal.  
F. J. Lagadec, Montreal.  
C. S. Westhorp, J. C. Thompson & Co., Montreal.  
A. W. Morrison, C.A., Montreal.

### Windsor Chapter.—

- Alan B. Cousins, Wallaceburg Brass Co. Ltd., Wallaceburg.  
V. Aylesworth, Canada and Dominion Sugar Co. Ltd., Windsor.  
E. R. McGee, Ford Motor Co. of Canada Ltd., Windsor.  
John A. Meyer, Chatham Malleable & Steel Products Ltd., Chatham.

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### Literature Received

#### The Application of Standard Costs to an Operating Budget.

N.A.C.A., Oct. 1, 1942.

A most splendid article on a most important phase of both Standard Cost and Operating Budgets.

#### Plant Values and Their Effect on Costs and Inventory Valuations.

N.A.C.A., Sept. 15, 1942.

Deals with a most important phase of Plant Asset Accounting and in most excellent style.

#### Streamlining the Accounts Receivable Record.

N.A.C.A., Sept. 15, 1942.

An article of particular interest to Accountants in these days of staff shortage and the inability to purchase mechanical office equipment.

#### Internal Check and Control as Distinguished from Internal Auditing.

The N.Y. C.P.A., Sept., 1942.

A most enlightening article which should be of real interest to all Accountants.

#### Food Cost Accounting.

The N.Y. C.P.A., Sept., 1942.

A short but valuable addition to the few articles on this subject.

#### Company Control by Publicity.

Can. Chartered Accountant, Oct.

A really excellent article dealing with information necessary to Auditors which is in the public interest.

#### Factory Costing—Part II: Wages and Materials.

The Federal Accountant, August, 1942.

Follows the first part which appeared in the July issue of the Federal Accountant and is of extreme interest to all Cost Accountants.

### SUPPLEMENTARY EXAMINATIONS

Many enquiries have been received at this office asking if supplementary examinations are to be held this fall.

Such examinations will be held in Fundamentals of Cost Accounting, Advanced Cost Accounting and Industrial Organization and Management if a sufficient number of candidates apply.

Those interested are urged to write immediately to the Secretary, stating which examination they wish to write, when an application for examination form will be sent to them.

## EDUCATIONAL PROSPECTUS

### THE SOCIETY OF INDUSTRIAL AND COST ACCOUNTANTS OF ONTARIO EDUCATIONAL PROSPECTUS

#### DEGREE

The Society of Industrial and Cost Accountants of Ontario will grant the degree of "Registered Industrial and Cost Accountant" and use of the letters R.I.A. to persons passing the prescribed examinations in Bookkeeping, Accounting, Fundamentals of Cost Accounting, Advanced Cost Accounting, Industrial Legislation and Industrial Organization and Management, and who submit an acceptable Cost Accounting Thesis and otherwise fulfil the requirements as laid down by the Society.

#### EXEMPTIONS

Exemption may be granted from the subjects of Bookkeeping and Accounting, providing the candidate can and does produce evidence that he has passed equivalent examinations in the subjects of Bookkeeping and Accounting which the Society approves.

No exemption can be secured from any other examination.

#### EXAMINATIONS

Examinations are held in April and May in each year at such time and place as the Society may from time to time determine, and in the following order:

1. Bookkeeping.
2. Accounting.
3. Fundamentals of Cost Accounting.
4. Advanced Cost Accounting.
5. Industrial Organization and Management.
6. Industrial Legislation.
7. Cost Accounting Thesis.

#### EXAMINATION FEES

The fees for examinations shall be \$5.00 per subject with the exception of the Cost Accounting Thesis, for which no fee is charged.

Fees must accompany the application for examination which must be made on the prescribed form and which may be had on application to the Secretary.

#### LECTURE COURSES

Evening Lecture Courses in all examination subjects with the exception of Industrial Legislation and which is covered by the Society, have been arranged by the Society in conjunction with all Ontario Universities in various centres at a fee of \$35.00 per subject.

The fee includes Lectures, marking of exercises, text books and Student membership in the Society for one year. There are approximately twenty-four lectures in each subject.

#### CORRESPONDENCE COURSE

A complete, combined progressive correspondence course is in course of preparation covering the above subject, and it is expected that such a course will be ready by the end of 1942. The cost is the same, viz., \$35.00 per subject. This course is being compiled through the combined facilities of Queen's University, University of Toronto and University of Western Ontario.

## Cost Accounting on War Contracts

By E. F. WOOD, R.I.A.

Chief Cost Accountant, Department of Munitions and Supply  
Before Vancouver Chapter, September 16th, and Fort William-Port Arthur  
Chapter September 22nd, 1942

Mr. Chairman and Gentlemen:

It is a great privilege and pleasure to have this opportunity of discussing briefly with you some of the problems to be dealt with in auditing or investigating costs of performing work in connection with the War. No doubt you are all familiar to some extent with the very widespread program which has been developed in this Canada of ours, and indeed, to attempt to adequately deal with even an outline of the complexities and ramifications would be impossible in the course of a short talk. However, I would like to mention a few of the high-lights before going into the actual accounting procedure.

As you no doubt appreciate, it is rather difficult to know what to put into an address of this kind, and what to leave out. Late in 1940, in talking to the Toronto Chapter of the Canadian Society of Cost Accountants and Industrial Engineers, I had the temerity to quote some information that had been given to me and which I had accepted in good faith, stating that back in Caesar's time it cost about 75c to kill a man as compared with \$3,000 per man during the Napoleonic Wars, \$5,000 in the American Civil War, \$21,000 per man in the last World War, and a much higher cost to-day. Unfortunately, this particular item was singled out for the most attention, and I was immediately deluged with inquiries as to how I knew that the cost in Caesar's time was actually 75c, and some requests for a production of cost audit statements to substantiate the figure quoted. Since then, I have attempted to stay on safer ground and at least deal with figures which are relatively recent and subject to verification if desired!

From a comparatively modest start shortly before the War under the Defence Purchasing Board, the purchase of munitions of war in Canada has developed into a gigantic volume to-day, requiring the services of several thousand officials and staff.

You will remember the Defence Purchasing Board was succeeded by the War Supply Board, and later, in April, 1940, by the Department of Munitions and Supply. At that date, while the volume of purchasing was fairly large, when we look back to-day it was obviously still on a relatively modest although rapidly increasing scale.

By the third quarter of 1940 contracts were being awarded at the rate of nearly 7500 per month. The comparative figure for the second quarter of 1942 is 18,029 per month, or approximately 720 per working day. In November, 1940, the total value of orders placed was reported at just over one billion dollars. The total is now well over 4½ billion.

Early in the war it became apparent that many considerations which normally govern our way of life become of secondary importance. During a period of total war, a maximum of goods must be diverted from civilian to military uses, existing plant facilities employed, before new construction

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be undertaken and a maximum of plant capacity must be turned over to war orders. Insofar as possible, it had been the policy of the Government to rely on existing plants to supply adequate quantities of munitions and components. It soon developed, however, that sufficient plant capacity did not exist, and the construction of wholly new plants was necessary. The construction and operation of these has in some cases been carried out under the direct supervision of the Department of Munitions and Supply, and in others under wholly-owned Government Companies, who are, in effect, branches of the same Department but who have specialized on certain types of production.

For example, the Allied War Supplies Corporation was incorporated in July, 1940, to supervise the construction and operation, on behalf of the Canadian and British Governments, of chemicals, explosives and ammunition filling plants owned and financed by the Government. From small beginnings, the original program has expanded tremendously, involving a capital expenditure of some 125 million. In July, 1942, there were 25 projects in production, many of them in excess of rated capacity. More than 50 thousand men and women are engaged in turning out high explosives, rifle and cannon components, TNT, intermediary chemicals, etc., and raw materials.

In addition, the construction of two new chemical plants, in which alkylate for high octane gasoline will be manufactured, and a new explosives plant have been authorized. Additions to six chemical and explosives plants are also being undertaken.

Of the 25 projects now producing, twelve are major undertakings. Four of these are explosive plants, three are shell-filling plants, one is engaged in fuse-filling, two are manufacturing ammonia, and one sulphuric acid.

Of the thirteen smaller undertakings in operation, ten are chemical plants,—producing, among other things, perchlorates, a smoke-producing chemical, aniline, and important intermediates—while three are engaged in the manufacture of other products.

The present program already permits the export of large quantities of explosives and chemicals abroad for shell-filling purposes; it also provides for the filling of all the shells, bombs and mines which are made in Canada. As a result, Canada has for some time been shipping filled complete rounds, and filled cartridges, projectiles, bombs, depth charges, mines, and fuses.

The urgent demand for explosives and chemicals in North America continues. Steps have already been taken to enlarge production facilities in some of the major projects by the installation of additional equipment at comparatively low cost. The whole Canadian explosive and chemical program is being closely co-ordinated with a similar program in the United States, and every effort is being made to utilize to the fullest extent possible the capacities of both countries.

Citadel Merchandising Co. Ltd. supervise the purchase of machine tools for war industries. Since its inception it has purchased and distributed machine tools to a value of approximately 150 million dollars.

Other Government companies are the sole purchasers of essential raw materials such as silk, rubber and wool, for war purposes.

Research Enterprises Limited manufacture war equipment of a secret

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nature, and also produce optical glass never before manufactured in Canada. The field in which it is working is highly technical and there was no background of Canadian experience. Nevertheless, the results have been most satisfactory, and the plant is now being enlarged to provide additional facilities.

Small Arms Limited are producing rifles, bayonets, and scabbards, and employ over two thousand men and women. Production has been very satisfactory both as to volume and quality.

Wartime Housing Limited are providing housing accommodation for munition workers in cities and towns across Canada, involving to the end of May, 1942, 12,808 houses, 82 staff houses, 9 dining halls, and 19 special buildings.

Wartime Merchant Shipping Limited administrate the cargo ship construction program.

Federal Aircraft Limited supervise the manufacture of a large program of Anson aircraft for the joint air training plan.

Recently a new company has been formed to supervise the construction and operation of a plant for synthetic rubber production, a project of tremendous magnitude and complexity.

In addition to the Crown companies, practically every factory, small or large, in Canada capable of war work is engaged in war contracts, either wholly or in part.

A relatively recent development has been the "bits and pieces" program whereby the large plants break down their work into small contracts, and sub-contract these as widely as possible in order first to speed up production and second to ensure that Canada's peace-time machine tool capacity may be fully utilized for war purposes. As an outstanding example of what has already been accomplished in this direction, the 25-pounder gun is made up of approximately 1286 parts. Of these, 529 parts, or 41%, are being produced by 63 small plants scattered through the provinces of Ontario and Quebec.

As you are no doubt aware, the Department of Munitions and Supply and the various Crown companies endeavor whenever possible to obtain competitive tenders so as to permit contracts being awarded on a fixed price basis, and by far the largest percentage of all contracts are so placed. For various reasons, it is not always possible or practical to secure satisfactory firm bids, and several types or variations of contracts have been designed to assure a fair deal to the contractor and at the same time properly protect public funds. Examples are the target price contract, ceiling price, and cost plus fixed fee, all subject to cost audit.

The most interesting, perhaps, on munitions work and one that is relatively new in Canada, is the target price system. The majority of munitions are not of commercial design and in many cases are of such a specialized nature that the normal company cannot readily undertake the work in their usual line of business. If the munition is one which has previously been produced in the United Kingdom, there may be information available regarding the cost in that country; but as the Canadian manufacturer will almost inevitably use a different type of machinery, different processes and different raw materials, there is more to be considered than merely variation in labor

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and material costs. The negotiating officers, consulting with the contractor's representatives, arrive at a figure comprising the three elements of labor, material, and overhead, which, in the opinion of both parties, is capable of attainment under the conditions in which the work is to be performed. If the actual costs are exactly equal to the target price, the contractor is paid a normal profit expressed as a lump sum, but usually on a percentage basis around 5%. Should the contractor's costs be less than the target price, the contractor is given, in addition to the profit allowance defined, a share of the savings effected, usually in some such proportion as 25% to the contractor and 75% to the Government. Should the actual cost exceed the target price, the profit allowance is reduced progressively to a minimum, of approximately 3%. This cost plus basis is used only for the target quantity, or usually about 5% of the total production required. When the costs are audited to determine the actual amount payable for the target quantity, the cost accountant also ascertains what, in his opinion, the production costs should be after the troubles incidental to manufacturing a new product have been overcome, and a fixed price is negotiated for the balance or "remainder" of the quantity required. To this extent, the purchase then becomes a fixed price contract.

The ceiling price contract provides that the contractor shall receive not more than the price stated in the order, but that an audit may be made to determine the actual costs, and if such costs, plus the rate of profit agreed on, is less than the ceiling price established, then the contractor shall refund the difference to the Government.

The cost plus fixed fee type is exactly what the name implies, but is almost always confined to a type of work on which it is not possible to pre-determine either a target or ceiling price, and performance is under the supervision of Government representatives so as to ensure the highest possible efficiency under prevailing conditions.

Usually each contract is dealt with specifically as a separate transaction, but an interesting variation from this is the form of contract now used in Canada for emergency repairs to naval ships either on account of the British Admiralty or the Canadian Government. Under the prime necessity of returning ships to service at the earliest possible moment, it is obviously impossible to negotiate a firm price on each repair job which would be fair to both the contractor and the Crown, and at the same time would not delay the progress of the work. Under the form of contract in force, a provisional rate of overhead is agreed on with the shipyard, based on the actual experience for the last fiscal year and modified where necessary or desirable by the projected figures for the current fiscal period. All repair work assigned to the yard is closely supervised by naval technical officers and the actual labor and material expended is checked by recorders who are familiar with ship work. Claims are prepared currently on this basis of actual labor, actual material, provisional overhead, and agreed rate of profit, and are paid promptly. As soon as practicable after the close of the fiscal year, the Cost Accounting Division establishes the actual overhead rate with the contractor and adjusts all claims paid during the period to pick up the difference between the provisional and actual rates of overhead. Essentially, the form of contract and the costing provisions are very similar to that

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adopted as standard in the United Kingdom some time ago for similar work.

In addition to the protective conditions on direct contracts, regulations have been established extending the right of audit to all sub-contracted work where the direct contract is on any form of cost-plus basis. Provision has also been made that, if so desired, the Government may have the contractor's public auditors perform the cost audit for the Crown. It is expected that a considerable quantity of such work will be done by the respective public accountants under these provisions so as to make the fullest possible use of the accounting staffs available.

It will be obvious from the foregoing that these various references to Cost require in actual application a yardstick or definition as to exactly what is meant by the word "Cost" as applied to a Government contract. Some two years ago, a study was made of existing practice in British, Canadian, and American Governments, and a Costing Memorandum adopted which is known as M & S 433 and is standard for all types of munition contracts placed in Canada, and no doubt is familiar to any of you who have had occasion to prepare cost statements in connection with Government work. At this point I would like to emphasize that the Cost Accounting Division is independent of the Department of Munitions and Supply, and is responsible for all cost accounting matters on war work to the Comptroller of the Treasury. We are essentially a fact finding organization, and report to the Department of Munitions and Supply fair and reasonable costs on any goods, article, or undertaking. I am mentioning this to make it clear that we, as cost accountants, do not determine the selling price or margin of profit, but merely, to the best of our ability, determine the cost as accurately as it can be ascertained. Administrative officials then set the price and the profit margin, taking into account all relevant factors.

In order to carry out this costing work, we have engaged a large and growing staff of cost accountants, and I think I am safe in saying almost every section of Canada is represented in our organization. We have endeavored, as far as possible, to appoint officials whose homes are in the area in which they are working, and who are familiar with the special conditions in that particular locality. While we have been fortunate in securing the assistance of several permanent Treasury Officers who are thoroughly familiar with Government procedure, the vast majority of our staff have been drawn from commercial life, and nearly all have had many years practical experience.

In theory, manufacturing costs consist of three separate and distinct elements, i.e., productive labor, direct materials, and expense items or overhead charges. In practice, it is not always possible to maintain a clear division between the three classes. For example, cost-of-living bonus is based on the normal working week, and is not increased if the employee works overtime. It is also calculated at a fixed rate per week rather than related to the hourly rate of wages. In cases where the hours worked vary substantially from the normal working week, it thus becomes impossible to record the employee's earnings for each day until the week is closed. Many contractors make a daily distribution of productive labor, charging job or account numbers with each man's time at his hourly rate, and balancing this distribution daily with the payroll, either by the use of mechanical equipment or by hand. To hold up this work to the end of the weekly period

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in order to relate the weekly cost-of-living bonus to his hourly rate and then redistribute all the charges for the week accordingly, would be impracticable. In theory, the cost-of-living bonus is an actual increase in the cost of productive labor, but obviously, in practice, it is essential under these circumstances to consider it as an overhead charge, if desired, setting it up as a separate overhead account.

There is considerable variation within classes of industries and between individual firms within industry in the application of accounting principles. It is, therefore, difficult to make hard and fast regulations which would be fair and equitable in every case. For instance, salaried foremen usually spend their entire time on supervisory work and automatically are charged to overhead. Yet in some few firms such individuals spend considerable time as active productive workers, perhaps for operations requiring special skill or knowledge which they alone possess.

We have repeatedly been requested to advise contractors exactly what cost accounting system we require to be used. Our policy has been not to disturb the contractor's existing system with which his staff are thoroughly familiar, provided that it is basically sound and will furnish the essential information required for the audit reports.

In order to carry out this program of cost auditing, the work has been divided into five main classifications, namely, Aircraft, Construction, Munitions and General, Shipyards, and Textiles, with headquarters at Ottawa, and Branch Offices at Victoria, B.C., Vancouver, Calgary, Winnipeg, Toronto, Montreal, St. John, N.B., Halifax, and St. Johns, Newfoundland. In addition to the staffs working out of the Branch Offices, Resident Cost Accountants are located at various points as required, and additional Branch Offices are opened from time to time as deemed necessary.

In investigating costs, it is usually relatively simple to ascertain the actual expenditure on direct labor and materials. However, in order to get the full picture, it is necessary to make a detailed examination of overhead charges, and in doing so, the question invariably rises as to what is and what is not an appropriate overhead for the contract in question. There are obviously many forms of expenditure which may be quite in order for commercial enterprises but which are not applicable to war work and, therefore, must be excluded in arriving at costs.

I would like to review briefly the Costing Memorandum, M & S 433:

The first section, headed "GENERAL RULE", reads:

"The cost of performing a particular contract shall consist only of expenditures made by the contractor in connection with the contract and shall be the sum of:

- (1) Direct Materials,
- (2) Direct Labor,
- (3) Direct Expenses,
- (4) A proper proportion of applicable indirect costs (including a reasonable proportion of management expenses)".

In other words, the basic rule to apply, regardless of any other considerations, is first of all: Is the charge incurred because of this contract?

The next section is headed "GENERAL ELEMENTS OF COST" and reads:

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"No definitions of the elements of cost may be stated which are of invariable application to all contractors, but in general the elements of cost may be defined as:

- (1) Manufacturing Cost,
  - (a) Direct Materials
  - (b) Direct (or Productive) Labor
  - (c) Direct Engineering Labor
  - (d) Miscellaneous Direct Factory Charges
  - (e) Indirect Factory Expenses
  - (f) Other Manufacturing Cost.
- (2) Miscellaneous Direct Expenses,
- (3) Miscellaneous Indirect Expenses".

I think you will agree that with contracts as widely diversified as grading an aerodrome to emergency repairs of ships, and from manufacturing small lots of electrical apparatus in a large commercial plant to costing a continuous single process product in a gigantic wholly Government owned plant, that the preceding sentence is almost superfluous. It is essential that any standard setup be sufficiently flexible to take care of special circumstances.

"**DIRECT MATERIALS**—includes in addition to materials purchased solely for the contract and processed by the contractor, or material obtained from sub-contractors, any other material purchased for stock which may subsequently be used and becomes a component part of the contract."

It is recognized, of course, that in many types of contracts, the contractors draw supplies, bolts, nuts, and many standard items from his regular stocks for commercial or other needs, and this provision was merely intended to remove any question of identifying all materials used as being purchased expressly for the particular contract.

"All materials shall be charged to the contract at the net laid down price after deducting all discounts and other similar items."

Some commercial firms credit cash discounts earned to their material costs, others keep the cash discounts entirely separate. On Government work all cash discounts must be credited to the contract, unless otherwise specifically provided in the contract itself. Also, no handling charges should be added to material costs, but where incurred should be included in Indirect Factory Expense.

"Costs shall be credited with the fair market value of all scrap produced from materials charged to the contract, either in manufacturing process, rejects, due to design changes, or from any other cause."

II. "**DIRECT LABOR**—Productive Labor which is performed directly on and is properly chargeable to the contract."

III. "**DIRECT ENGINEERING LABOR**—Compensation of professional engineers and draftsmen properly chargeable to the contract."

IV. "**MISCELLANEOUS DIRECT FACTORY CHARGES**—Items properly chargeable to the contract, but which do not fall within any of the above categories. For example, a royalty payable."

V. "**INDIRECT FACTORY EXPENSES**—Factory overhead or burden.

- (a) Labor: Supervision and inspection, clerical, timekeeping, stores tool crib, cleaners, watchmen, etc.
- (b) Materials and Supplies: Shop fuel, lubricants, waste, non-durable tools and gauges, etc.

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- (c) Service Expenses: Expenses of a general nature such as power, heat, light, operation and maintenance of general plant assets and facilities.
- (d) Fixed Charges: Recurring charges such as property taxes, rentals and provision for depreciation. In making provision for depreciation (of machinery) consideration may be given to the number and lengths of shifts, but the provision shall not be inconsistent with the regulations imparted by the Commissioner of Income Tax."

Allowance will also be made for special rates of depreciation provided under rulings of the Depreciation Board, but such special depreciation is not subject to profit.

- (e) "Miscellaneous Indirect Factory Expenses: Items not directly chargeable to the contract, such as purchasing expenses, employees' welfare, employer's payments to any Federal Unemployment or health fund; but shall not include:
  - (1) Payments deducted or chargeable to employees.
  - (2) Pensions and retirement payments."

Where a commercial firm has in force, at the time the contract is awarded, a pension scheme which is credited periodically with a percentage of the wages paid to all employees, such a charge would be allowed in costs insofar as it was applicable, but we do not allow lump sum pension or retirement payments, on the grounds that such lump sums would in effect be earned over a period of years, and the fact that the employee happened to be temporarily on a Government contract at the time of the retirement would not justify the inclusion of such charges as a cost of the Government work.

VI. "OTHER MANUFACTURING COSTS—includes items not properly or satisfactorily chargeable to factory costs, but which upon a complete showing of all pertinent facts, are properly to be included as a cost of the contract, such as:

Experimental and development charges."

This is in effect a safeguarding clause to ensure that no proper charge be disallowed because of a technical ruling that it did not fall within any of the preceding clauses.

- 2. Miscellaneous Direct Expenses: Sundry items—fees paid for tests, travelling expenses applicable to the contract, etc.
- 3. Miscellaneous Indirect Expenses:
  - (a) Indirect Engineering Expense "Engineering Overhead" consisting of labor, materials and miscellaneous expenses.  
B/P. Papers, Tracing Paper, drafting room supplies, etc.
  - (b) Administrative expenses including salaries of corporate and executive officers, office salaries, janitors, cleaners, miscellaneous office and administrative expenses such as stationery and office supplies, etc.
  - (b) Administrative expenses including salaries of corporate and executive officers, office salaries, janitors, cleaners, miscellaneous office and administrative expenses such as stationery and office supplies, postage, normal contributions to local charities and other necessary office expenses."

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Some of these items may be expressly excluded in the particular contract; for example, salaries of corporate officials.

I would now like to run over the list of exclusions or those items which are automatically disallowed as an element of cost:

- (1) "Allowances for interest on invested capital, bonds, debentures, bank or other loans."

This has probably provoked more discussion than any other item. It is quite true that interest charges, whether for a bank loan, or on a bond issue, or in any other form, must be paid. The real question is, are such expenses a charge to costs or to profits? If the same margin of profit is to be paid to two companies making the same article, would it be fair to pay one company more than another simply because one company had provided working capital through bonds or other debentures while the other had secured their funds through common stock issue? The Government policy is that, in fairness to all, interest charges, if incurred, must be provided from profits.

- (2) Entertainment expenses.
- (3) Dues and other memberships other than regular trade associations.
- (4) Donations (except as stated in Section 3, Subsection b).
- (5) Losses on other contracts.
- (6) Losses from sale or exchange of capital assets.
- (7) Depreciation on buildings, machinery or equipment paid for by the Crown.
- (8) Fines and Penalties.
- (9) Amortization of unrealized appreciation of value of assets."

This refers to the unlikely contingency of a firm writing off assets on an inflated value.

- (10) "Expenses, maintenance and/or depreciation of excess facilities."

This limits the contribution by the Government contract to that proportion of the plant facilities actually used for the purposes of the contract.

- (11) Increases in reserves for contingencies, repairs, compensation insurance, and guaranteed work.
- (12) Federal and Provincial income, excess profit or surtaxes.
- (13) Unreasonable compensation for officers and employees.
- (14) Bond discount or finance charges.
- (15) Premiums for life insurance on the lives of officers.
- (16) Legal and accounting fees in connection with reorganizations, security issues, or capital stock issues.
- (17) Losses on investments, bad debts and expenses of collection.
- (18) Advertising and Selling Expenses."

"**ALLOCATION OF INDIRECT COSTS**—No general rule is applicable in all cases. The proper proportion of indirect costs chargeable to the contract will depend on the ascertaining of all facts and circumstances relating thereto, subject however, to a requirement that all items which have no relation to the contract shall be eliminated from the amount to be allocated.

"Provided the articles produced for the contract are of the same general class as the concurrent production of the plant, then allowable indirect expenses may be distributed on the basis of the proportion which the direct productive labor on the contract bears to the total productive labor of the

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particular section wherein the contract work may be carried out, except that if indirect expenses are incurred in different amounts and in different proportions by the various producing departments, consideration shall be given to such circumstances to the extent necessary to make a fair and reasonable determination. Administrative and other general expenses may be dealt with in a like manner.

"In cases where the product is essentially different to the concurrent production, indirect costs wherever possible shall be segregated and the proper items thereof charged direct to the contract."

Many manufacturing firms have distributed indirect expenses or overhead as a percentage of direct labor, either by dollar value or hours, in their commercial work for so many years that it is something of a shock to be faced with the blunt statement that overhead should not be distributed as a percentage of productive labor. Insofar as commercial work is concerned, provided the product is of the same general class or kind, there is probably no serious objection to such an allocation, and admittedly is a very simple and easy system to use. However, even a casual study will show that only a small portion of the charges considered as "overhead" do actually vary in proportion to productive labor, while many charges, such as rent, taxes, insurance, etc., will change very little regardless of whether the plant is working at 10% or 100% of capacity, and in fact many of them will continue even if the plant is shut down. It is also obvious that a scientific distribution of overhead will take into account the actual facilities used on the particular work. For example, one particular production might involve a small amount of direct labor and a large amount of machinery and equipment, while another product might require a large percentage of hand labor and very little equipment. Some firms of course have extremely intricate systems, even to the point of developing separate rates of overhead for each machine or production centre. There is always the danger of carrying systems to the point where they defeat their own purpose and the clerical cost is out of proportion to the benefits derived. I think the real yardstick is to use good common sense in keeping any system as simple as possible provided the essential facts are obtained.

If a Government contract is being produced in a separate unit of the plant, the problem is relatively simple, and I am glad to say many of the contracts fall into this class.

"ACCOUNTS—Contractors' accounts shall be kept in such a manner as to clearly disclose the nature and amounts of the different items of cost pertaining to the contract, and all records of original entry must be preserved in a form available for ready reference until released for disposal by the Minister."

This is merely the usual provision to guard against difficulty in verifying claims. We have run across one or two cases where firms followed their usual commercial practice and destroyed time cards, for instance, as soon as the payroll was posted and paid.

I shall be very glad to answer to the best of my ability any questions you may wish to ask, and in conclusion, may I say that we of the Cost Division are very glad at any time to be of any assistance we can to any of the contracting companies on all matters relating to costs on Government contracts.

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### Costs and Profits

Editorial in London Times re Contracts in United Kingdom

The Public Accounts Committee of the House of Commons has effectively scotched an idea that a strict scrutiny of contract prices, with the object of ensuring production of war material at the lowest reasonable cost, is unnecessary because the Excess Profits Tax would restore any abnormal profits to the Treasury. To make sure of its ground the committee consulted the Treasury and the Treasury has produced a note which lays down an unassailable policy. It is still, as always, in the public interest that strict economy should be applied to the execution of Government contracts. Looseness of control begets extravagance and waste and habits of carelessness in management. That form of contract which entitles the contractor to recover the cost of work plus a stated percentage for overhead costs and management is notorious for its release of the brakes on expenditure. It is not to the contractor's interest to reduce cost, but directly the opposite, because his reward is in exact relation to the magnitude of the outlay. This every one knows; and therefore the "cost plus" contract has come to be tolerated only as an exceptional resort when costs are unpredictable. Apparently it has been less readily understood that a fixed price contract may also permit of an excess in the cost of Government work which is an injury to the public and that the State should practice and require the same scrupulous attention to economy as a capable and prudent man would employ in the direction of his own affairs.

Here the Treasury's note applies. Firms holding fixed price contracts were questioning the necessity for a close check on prices in relation to current costs. The fixed price contract is, in a competitive market, the accredited means of securing economy in production. The open conditions of a competitive market do not now exist, but there are other means, through costings and comparisons of results between one undertaking and another, of checking both price and efficiency. Business transactions with the State must be on a business footing and the State must be as well assured as possible that it is getting value for the taxpayers' money.

A tax on excess profits is in no way a substitute for economy in production. Nor is the profit-maker as disinterested as the stated case would imply. The Treasury points out that 20 per cent of the excess profits tax is to be refunded after the war and so there is an incentive to raise profits in the shareholders' interest. Moreover, if prices were uncontrolled, except for the operation of taxation, "there would be no effective deterrent to unwarranted rises in cost of whatever kind." A Tax on realized "excess" profits puts no check on excessive expenditure and provides no means of discovering uneconomic units, or methods of production. Two other considerations advanced by the Treasury are important. Standard profits "have no necessary relation to present performance or relative efficiency" nor have they "any relation to the standard of profit which can reasonably be allowed in war-time to the suppliers of vital stores to the State." In brief, the State's interest in economy of production and the prevention of profiteering, in visible or invisible forms, takes precedence of the fiscal check on the retention of undue amounts of profit. The fiscal check would, in fact, be powerless

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in the case of an undertaking which, as the Committee on Expenditure reports, successfully resisted for a long time the efforts of supply Departments to obtain information on its actual production costs. Now that investigation has been made, the committee's judgment is that the prices hitherto paid have been "altogether excessive" and that "large sums, which greatly exceed any reasonable remuneration are in the hands of the company" and require an early adjustment between the company and the Departments. Taxation machinery would not have exposed these facts; and the more the Treasury strengthens the hands of the supply Departments in a rigorous grip on prices the better will it be for the war effort. The rectification of accounts between the State and firms which, in order to undertake Government work, have incurred capital expenditure for which they may not be recouped by the contracts they fulfil is entirely another matter, for which special provision has been made.

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## Trends in Price Control

(An Address by K. W. Taylor, Secretary of the Wartime Prices and Trade Board, to the Cost and Management Institute,  
Montreal, October 2, 1942)

Your President, in his letter asking me to be with you this evening, invited me to speak on "Wartime Trends". The expansiveness of the invitation so overwhelmed me that with almost indecent haste and lack of modesty I accepted. But I soon re-discovered what ought to be a well-known fact, that the bigger the subject the more difficult it is for an ordinary man to say much that is either useful or interesting about it. It was Voltaire who once apologized to a friend for writing him so long a letter in answer to his question, but explained that he did not have time to write a short one. So I have decided to confine myself to a much more modest and restricted subject, and one which I do know something 'about, and speak to you this evening on some trends in wartime price control.

Price control is an essential part of wartime economic policy:  
—erratically rising prices confuse producer, labor and management;  
—they impose grave social injustices on large groups in the population;  
—they undermine morale;  
—they invite speculation and hoarding and thus interfere with the smooth flow of essential supplies;  
—they enormously complicate the problems of war finance;  
—they multiply the problems of post-war reconstruction, and may make any orderly reconstruction impossible.

During and after the last war every belligerent country experienced the evils of inflation—United Kingdom, Canada and the United States experienced price increases of from 100 to 200 per cent; France and Italy from 400 to 500 per cent; in Germany and Austria the price increases finally reached infinity.

Every belligerent country learned its lesson, and every belligerent country in this war introduced some form of price control at the very outset. Germany introduced its over-all price control in October 1936, but that

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serves only to indicate the date by which Germany, in her own heart, had decided to wage war upon the world.

In Canada the Wartime Prices and Trade Board was created on September 3, 1939, and given broad but not unlimited powers to control the prices and supplies of the staple necessities of life. From the outset it did a competent and useful job, smoothing out supply problems, anticipating difficulties, adapting its methods to varying circumstances, and serving as a steady and restraining influence on the price structure.

During the first year or two of war there was little danger of any real or serious inflaton taking place. We entered the war with what appeared to be a tragic legacy of the 1930's but which, in fact, became one of our principal economic assets in the early stages of the war—idle men, idle machines, surplus stocks of raw materials and surplus capacity to produce a wide range and vast quantities of basic raw materials.

During the first two years of war in Canada the danger of inflation lay only in the possibilities of panic, confusion, irregular supplies, and general lack of confidence. Given a steady hand and intelligence and skill in the organization of supplies, price inflation was not difficult to check, because fundamentally (except for a few special commodities or a few special skills) there were no real shortages.

By the late spring or early summer of 1941, however, the basic conditions had changed. The accelerating tempo of war production had swallowed up the reserves of idle equipment, idle labor and surplus stocks of raw materials. What had appeared as sporadic shortages of materials in 1940 now became chronic and spread rapidly from industry to industry. Expanding civilian purchasing power swelled the demand for consumer goods of all descriptions. For every unit coming on the market, there were two buyers bidding for it. The zone of full employment had been reached and entered on a broad front.

But the war program must still expand. War contractors, anxious to fill or exceed their commitments or deliveries to the government, bid for labor and materials on the open market. Civilian industry manufacturers, seeing the buoyant purchasing power all around them, cheerfully bid still higher prices for the same materials and labor, knowing the prosperous buying public would willingly recoup them for their higher costs. The war effort and our peace-time standards of living were in conflict. The spiral of inflation had begun.

Apart from a short, sharp rise in prices during the first three or four months of the war, the price level, prior to the spring of 1941, had remained on the whole remarkably stable. Looking back now we can see that the spiral began to get under way in about March or April 1941. But in the midst of events things are not so easy to see, and it was not until some time in August of last year that this new and dangerous threat to our war effort became apparent and demanded immediate consideration. The result of this consideration was the anti-inflation program announced by the Prime Minister just about a year ago, a program which without exaggeration he described as "an experiment hitherto untried on this continent and, perhaps, having regard to its breadth and variety, hitherto untried by the will and consent of any free people anywhere."

The Government's program had in it, explicit or implicit, five main points:

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- (a) Price ceiling on goods and services;
- (b) Wage and salary ceilings;
- (c) Priority, allocation and rationing controls;
- (d) Profit and income controls (fiscal program);
- (e) Man-power controls.

The price ceiling, during its first year of operation, has passed through a series of logical and not unexpected stages. Or, more accurately, the price ceiling policy in its application has experienced a series of shifts in emphasis.

The first job was to put over the idea, to explain and convince all sections and groups of the public that we meant business; that the Government meant exactly what it had said. This was essentially a public relations job and, with the most complete co-operation of business and press, of consumers and women's organizations, of service clubs, labor groups and farm groups, the job was done. During the first few weeks of this period a common reaction of those we consulted was: "This is a fine idea, a splendid theory, it will put a strong brake on inflation, but of course you do not mean it literally." But bit by bit the job was done and, by Christmas, we had won the cheerful co-operation of all but a few scattered groups to the acceptance of the idea. Our first real battle was won, for without overwhelming public support the policy could never succeed.

Our second job, which began almost concurrently with the first, but which lasted a good deal longer (and indeed which will never be entirely finished), was that of adjusting the tremendous number of individual anomalies and time-lag problems embedded in "frozen" price structure of the basic period. This might be called "the battle of the squeeze":

- (a) Exemptions;
- (b) Time-lags;
- (c) Seasonal prices;
- (d) Seasonal goods;
- (e) New goods and modified goods;
- (f) Individual anomalies;
- (g) Import and export problems (subsidies and bulk purchases).

These problems were met with developing sets of principles, plus a good deal of ingenuity and adaptation to particular circumstances.

This soon led to a third shift in emphasis which developed into the Division of Simplified Practice. This division had a dual purpose:

- (a) To keep the floor of costs enough below the ceiling of selling prices to make life tolerable for manufacturer and merchant;
- (b) To conserve scarce materials.

By this time the United States had become an active belligerent, Japan had overrun South-east Asia and the war against shipping had developed a new high in intensity, and the prime emphasis shifted to problems of supply. Japanese conquests and the intense submarine war seriously curtailed overseas imports. The reduced arrivals of such materials had to be matched against a still increasing tempo of war production. The United States, which for two years had been an almost unlimited source for both basic war materials and civilian requirements, now had stepped up its own war production to a point where this flow was curtailed and in the case of some civilian foods, almost dried up. This has involved priorities, allocations, and rationing.

There has been a lot of rationing at the earlier processing stages for

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two years or more. Wool, for example, has, in effect, been rationed at the manufacturer's level ever since war broke out. Consumer rationing became desirable for sugar in January 1942, for gasoline in April, and for tea and coffee in May. Coupon rationing was introduced for sugar in July and for tea and coffee in August.

Rationing is merely the application of the principle of "fair share" to the conditions of total war. In the last war, and on this Continent in this war, rationing has been regarded by most people as a sign of desperation, of weakness, a thing to be adopted only as a last extreme resort. In England, in Germany, and in Russia in this war rationing has quite properly been regarded as a mark of intelligence, of ordinary common sense, and of competent and reasonable administration—not a policy to be needlessly or thoughtlessly embarked upon—but the sensible approach wherever the demand of expanding consumer purchasing power begins to press seriously upon a supply of consumer goods curtailed by the diversion of men and materials to more essential wartime tasks and duties.

Wherever such short supply meets such expanding purchasing power, the available goods will get allocated or distributed somehow. The methods of allocation or distribution offer several choices. You can ration by price, you can ration by queue, you can ration by permit, or you can ration by coupon. The first two methods are the most unjust and, at least for the ordinary articles of everyday life, most intolerable. And as the exigencies of war press upon the output of consumer goods, there must, in any intelligently governed country, be an extension, as the need arises, of allocation on a decent basis, of the application of the principle of 'fair share'.

How has the price control policy in Canada actually worked? There is a real danger in getting complacent but there are times, not very often perhaps, when it does us good and is heartening to morale to stand up, look about and take some real satisfaction in a job well done. We are entitled to say that the job of price control in Canada has been well done.

During the first three years of the last war the costs of living rose 35 per cent. During the first three years of this war, with a much greater economic diversion away from consumer goods into war production, the cost of living has risen only 16½ per cent.

The normal pattern of wartime prices is that they start to rise slowly but steadily gather momentum until they end in a steep upward inflationary spiral. That was true of the last war and has been true of every preceding major war. During the first year of this war, however, the cost of living rose 5 per cent; in the second year, 7 per cent; but in the first full year of the price ceiling it has risen only a little over 2 per cent.

Past history in both peace and war indicates that Canadian prices parallel American prices very closely. During the past year our cost of living has risen about 2 per cent; but the United States index between October 1, 1941 and the effective date of the American partial price ceiling in June rose nearly 8 per cent. Every 1 per cent increase in the cost of living index adds 35 to 40 million dollars a year to the food, fuel, clothing and other family bills of the two and one-half million Canadian families. An 8 or 10 per cent rise in the cost of living during the past year would have cost the Canadian consumer a sum of money not far short of \$400,000,000 a year, and the impact of such added costs on wage earners and industry generally would

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have given to the inflationary spiral a momentum which it would probably have been impossible to brake.

A final shift in emphasis has developed rapidly in recent months. Basically it is a shortage of man-power. By and large there are not enough men and women in this country, willing and able to work, to do all the things that want to be done. There is not enough labor to go round. What the country is now embarking upon is virtually a rationing of labor. The direct task of steering and allocating labor into the most effective uses belongs to the Director of National Service. But the Wartime Prices and Trade Board has been given a complementary and equally vital task. Our job is, by planned restriction and curtailment of less essential industries and services, to make available in as orderly a manner as the circumstances permit, the maximum supply of labor for essential purposes.

Hitherto we have thought of our job as one of providing as large a supply of civilian goods as possible consistent with our expanding war program. Now we approach it with the question "How little can we produce and still maintain essential standards of civilian health and efficiency?"

Mr. Ilsley, the Minister of Finance, and Mr. Gordon, the Chairman of the Wartime Prices and Trade Board, in two speeches to the Canadian Chamber of Commerce at the Seigniory Club recently, have described in greater detail what this curtailment, concentration, and man-power diversion program is going to mean. It cannot be a painless operation. It is going to mean considerable dislocation and disruption of civilian industry. There will be a certain degree of discrimination between industries and groups which may appear for the moment to be unfair, but which we must all accept for the time being as in the national interest. But consistent with the urgency of military and war production needs, it will be done in as orderly and fair a manner as possible.

Hitherto the impingement of the war on the average Canadian at home has been at most one of inconvenience. Indeed, very large sections of our population are to-day enjoying a higher standard of life than ever before. But the period of mere inconvenience is drawing to a close, and the period of real sacrifices for those of us at home is immediately before us.

To carry out this essential victory program we need, above all, the support, the understanding and the willing co-operation of the whole people —farm and city, labor and management, professional man and housewife. Without such support we cannot succeed; with it, we cannot fail; for the war against inflation to be successful must, like the war against Hitler, be a people's war.

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### Balance of Season 1942-1943

November 13th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 2 in "Cost Series."

Subject: "The Simplification of Cost Records."

Speaker: To be announced.

November 27th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 2 in "Management Series."

Subject: "This Job of Office Management."

Speaker: Mr. John Rae, Chief of Routine Efficiency, Bank of Montreal.

December 11th—Dinner and Students' Night.

Details to be announced.

January 15th—Soiree Francaise.

Time, Place and Speaker to be announced.

January 29th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 3 in "Cost Series."

Subject: "Railway Costs."

Speaker: Mr. H. C. Reid, B.A., M.S. (Trans.), General Statistician, Canadian Pacific Railway.

February 12th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 3 in "Management Series."

Subject: "Salvaging Production."

Speaker—Mr. S. Farquharson, M.E.I.C., Resident Cost Accountant, Treasury Branch, Dept. of Finance.

February 26th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 4 in "Cost Series."

Subject: "Hotel and Restaurant Costs."

Speaker: Mr. Maurice Chartrand, B.Sc., Hotel and Restaurant Consultant.

Mr. P. W. Wright, L.C.M.I., Dominion President, C.S.C.A. and I.E., will also speak on "Society Matters."

March 12th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 4 in "Management Series."

Subject: "The Work of the Insurance Engineer."

Speaker: Mr. St. Clair Ross, Insurance Engineer, Morris & MakKenzie Ltd.

March—Plant Visit.

Time and Place to be Announced.

## COST AND MANAGEMENT

March 26th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 5 in "Cost Series."

Subject and Speaker to be Announced.

April 9th—Dinner and Lecture Meeting—Faculty Club.

Lecture No. 5 in "Management Series."

Subject: "Incentives to Worker, Salesman and Executive."

Speaker: Mr. F. R. Manuel, Senior Engineering Staff, Stevenson & Kellogg Ltd., Management Engineers.

May 7th—Closing Dinner and Annual Meeting—Faculty Club.

Election of Directors and Officers.

Address: Management—Vocation or Profession?"

Speaker: Mr. A. V. Madge, L.C.M.I., President, The Cost and Management Institute.

# ATTENTION!

From time to time we receive requests from our Western Chapters to have Eastern members who may be visiting the West, call on our Chapters there. Any member who can address the Chapters and is willing to do so will be doubly welcomed, but members who merely wish to pay a courtesy call will receive a royal welcome. Remember the fellows out West are far away from Headquarters, and a visit on your part when in the vicinity will do a lot to help them.

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